

## Macroscopic and Microscopic Identification of Cortex type of Decoction Pieces Commonly Found in Hong Kong



# Cortex Mori\*

**Source** The dried root bark of *Morus alba* L. in the family Moraceae

**Property  
and Flavour** Cold; sweet

**Meridian  
Affinity** Liver meridian

**Actions** To drain the lung and alleviate panting, induce urination and resolve oedema

**Production  
Area** Mainly produced in Zhejiang, Jiangsu, etc.

Note:

\* Its name in Chinese Pharmacopoeia (2025 Edition) is “Mori Cortex”.



衛生署  
Department of Health

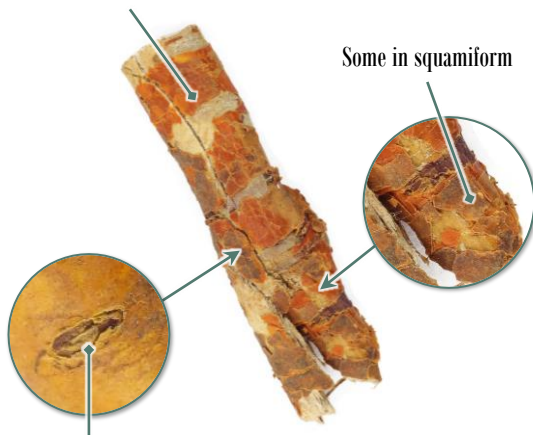


# Macroscopic Identification Features

## Cortex Mori (Sections)

**Shape** Quilled or in slices, varies in size

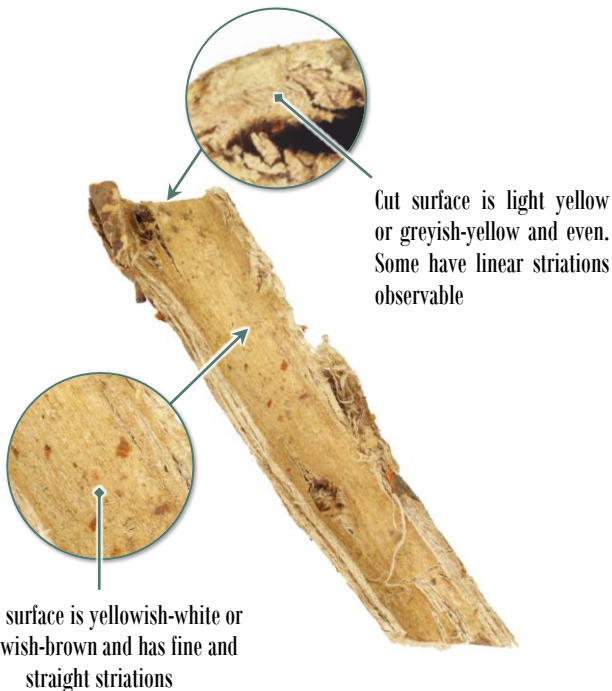
Cork on the outer surface orange-yellow or brown



Some with oblong or linear lenticels visible

1 cm





1 cm



**Texture** Light, hard and tough, extremely fibrous, hard to break. Easily lacerate along the longer edge, with dust wafts when being lacerated

**Fracture** Yellowish-white, strongly fibrous



**Odour** Slight



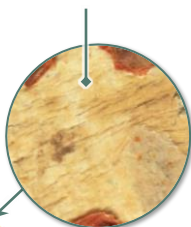
## Cortex Mori (Slivers)

**Shape** Irregularly strip-shaped, varies in size

Cork on the outer surface orange-yellow or brown, some in squamiform



Some cork is removed

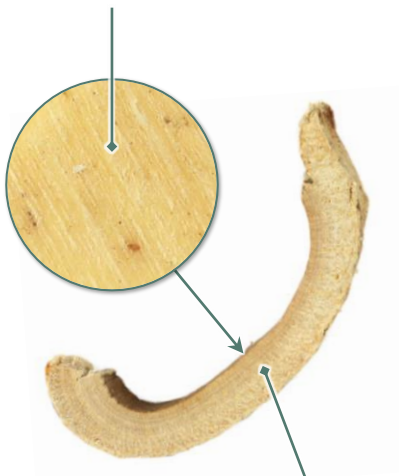


1 cm

Some with oblong or linear lenticels visible



Inner surface is yellowish-white or yellowish-brown and has fine and straight striations



1 cm

Cut surface is light yellow or greyish-yellow and even.  
Some have linear striations observable



**Texture** Light, hard and tough, extremely fibrous

**Fracture** Yellowish-white, uneven, strongly fibrous, some slightly appear laminated, dust wafts when broken



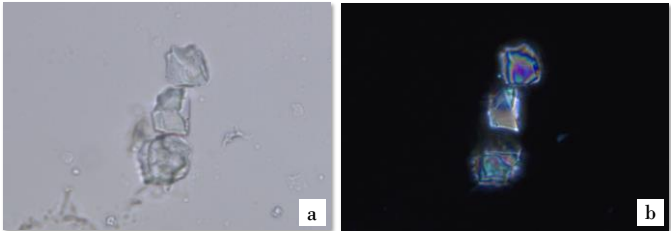
**Odour** Slight



# ■ ■ ■ Features of Simplified Powder ■ Microscopic Identification

## - Crystal -

### Prism of calcium oxalate



50 μm

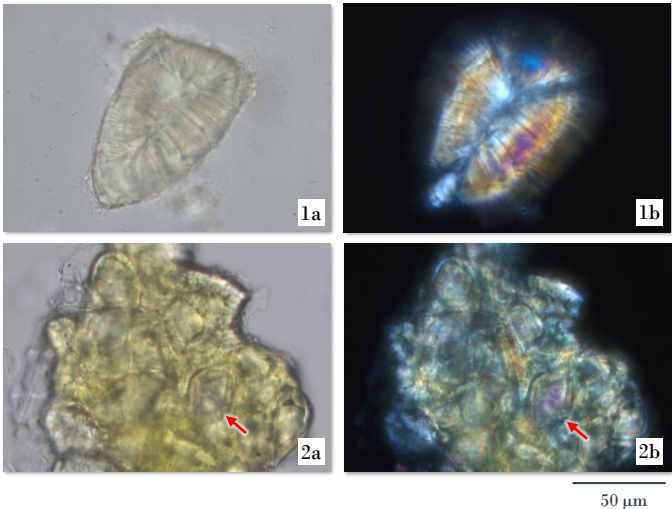
Appears rhombic or polyhedral, scattered or present in crystal cell with slightly thick wall; bright white or polychromatic under polarized light microscope

*a. features under bright field; b. features under polarized light*



## Sclerenchyma

### Stone cell



Sub-rounded, sub-square or irregular, singly scattered (1) or present in groups (2), some are observable to adhere to crystal cell, wall is thick or extremely thick, distinct pit canals, some with prism of calcium oxalate (→) observable in lumen; bright white or polychromatic under polarized light microscope

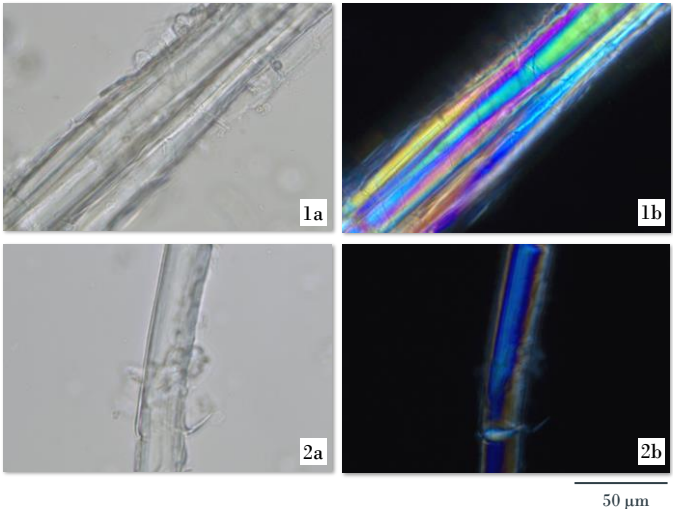
*a. features under bright field; b. features under polarized light*



# Additional Features of Powder Microscopic Identification

## - Sclerenchyma -

### Fibre



Frequently found, in bundles (1) or singly scattered (2), wall is extremely thick;  
polychromatic under polarized light microscope

*a. features under bright field; b. features under polarized light*



## Secretory tissue

### Laticifer



50  $\mu$ m

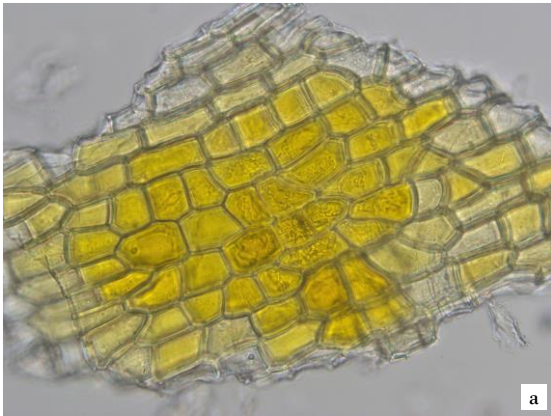
Barely found or occasionally found, contains tiny granular secretion

*a. features under bright field; b. features under polarized light*



- Protective tissue -

Cork cell



50  $\mu$ m

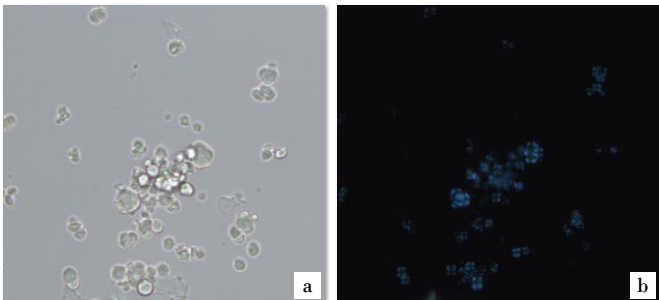
Colourless or yellow, appears polygonal in surface view

a. features under bright field; b. features under polarized light



## - Starch -

### Starch granule



50  $\mu\text{m}$

Frequently found, simple granule appears sub-spherical, hilum usually indistinct, compound granule consists of 2-8 units; black and cruciate-shaped under polarized light microscope

*a. features under bright field; b. features under polarized light*





## Key Identification Features

### - Macroscopic features -

- ◇ Cork on the outer surface is orange-yellow or brown, some in squamiform, some with oblong or linear lenticels visible
- ◇ Fracture is yellowish-white and strongly fibrous

### - Powder microscopic features -

- ◇ Prism of calcium oxalate appears rhombic or polyhedral, scattered or present in crystal cell with slightly thick wall
- ◇ Stone cell appears sub-rounded, sub-square or irregular, singly scattered or present in groups. Some with prism of calcium oxalate observable in lumen

For more information, please refer to [website of the Hong Kong Chinese Materia Medica Standards](#):

Cortex Mori — HKCMMS (Vol 3)

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